



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/616,037

07/10/2003

Hong-Seok Lee

277/011

9800

27849 7590 09/21/2007  
LEE & MORSE, P.C.  
3141 FAIRVIEW PARK DRIVE  
SUITE 500  
FALLS CHURCH, VA 22042

EXAMINER

BODDIE, WILLIAM

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

09/21/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/616,037

Applicant(s)

LEE ET AL.

Examiner

William L. Boddie

Art Unit

2629

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 13 September 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

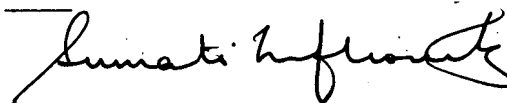
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1,3-8 and 10-20.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_  
13. ☐ Other: \_\_\_\_\_.



**SUMATI LEFKOWITZ  
SUPERVISORY PATENT EXAMINER**

Continuation of 11. does NOT place the application in condition for allowance because: the Applicants' arguments are not persuasive. On page 7 of the remarks, the Applicants traverse the 112 rejection of claim 16. Specifically the Applicants argue that claim 16 is definite and point embodiments within the specification.

The Examiner must respectfully disagree. While it appears as though the Applicants were attempting to claim the limitations of figure 4, claim 16 as currently worded does not capture those limitations. Specifically, claim 16 requires that the non-display period include both a first and second no-light display period. This limitation alone is in line with figure 4. The claim becomes indefinite, however, when it is further required that the display period occur between the two no-light display periods. This would require that the non-display period, which contains a first and second no-light display period, span to include the display period. It is for this reason that the claim is considered indefinite. As such the rejection of claim 16 is seen as proper and is thus maintained. On pages 7-10 of the remarks, the Applicants traverse the rejections of claims 1 and 8. Specifically the Applicants claim that Melnick does not disclose displaying a black display period after a white light display period.

The Examiner agrees that Melnick does not disclose all the limitations of claim 1, nor even the limitation requiring the display of a black display period after a white light display period. To explain the purpose of the Melnick prior art, we must start with the Nally reference.

As shown in the previous office action, Nally discloses all of the limitations of claims 1 and 8, except for the correct arrangement of the white and black periods. Specifically, Nally discloses, that the black period occurs before the white period in figure 7. In the limitations of claims 1 and 8, it is required that the black period occur after the white period. At this time it should be noted that Nally does not require that the black period occur before the white period. Instead, Nally's aim is to achieve a zero voltage period which transitions to a high burst immediately before the display data. This intention is disclosed throughout the specification. It is due to the characteristics of the liquid crystal display of Nally that this zero voltage period – high voltage period corresponds to a black – white period. It is immediately clear from figure 7 of Nally, that the liquid crystal used by Nally is dark when no voltage is applied and vice versa.

It is at this point that Melnick is introduced. Melnick discloses using a liquid crystal material that is clear when no voltage is applied and is dark when a high voltage is applied. As noted in the previous office action, Melnick discloses the motivation for switching to this liquid crystal material stating that both higher color purity and higher brightness are achieved.

Therefore it should be clear that the driving waveform of Nally, when replaced with the liquid crystal material of Melnick, would then create a white – black period. As such the limitations of claims 1 and 8 are met.

As shown above the combination of Nally and Melnick does in fact disclose all the claim limitations of at least claims 1 and 8. As such the rejections are seen as proper and are thus maintained.

In response to Applicant's argument, on page 10 of the remarks, that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

As to the additional traversals of the rejections, all of these arguments were based on the claimed dependencies. As shown above the rejection of independent claims 1 and 8 are seen as proper, as such the dependent claims are also maintained.

The amendment presented by the Applicants has been entered. As to the Applicants request for an interview, if one has not been previously conducted, the Applicants are pointed to the interview on June 27th, 2006. If the Applicants desire an additional interview they asked to contact the Examiner via telephone.

As shown above the rejections of the final office action mailed July 13th, 2007 are seen as proper and are thus maintained.